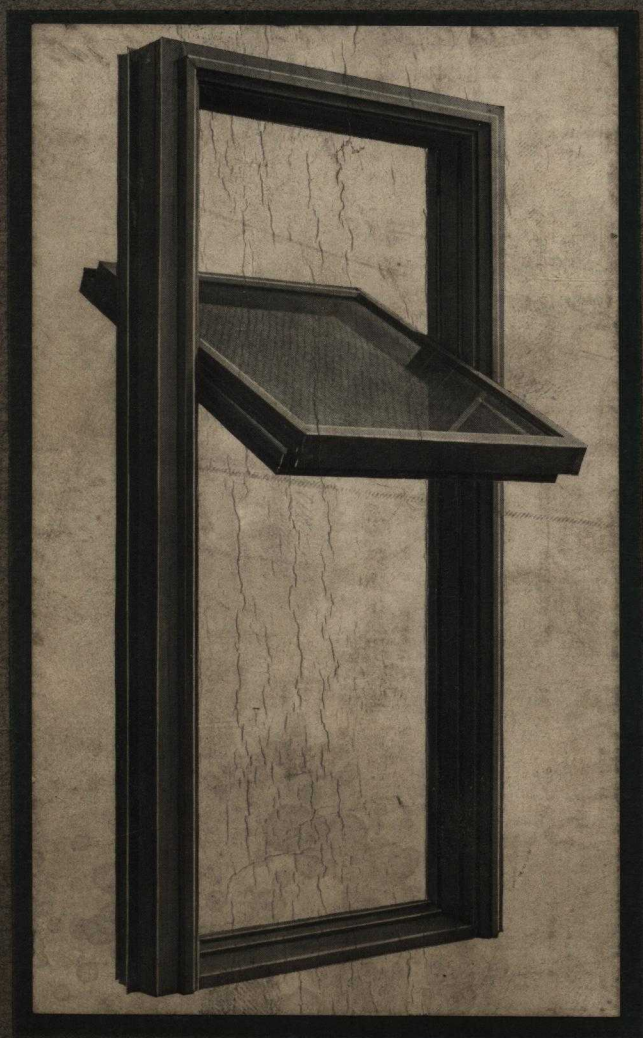


The MULLINS SHEET METAL FIREPROOF WINDOWS



Manufactured by
The W.H. MULLINS CO.
SALEM, OHIO, U.S.A.

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INTERNATIONAL

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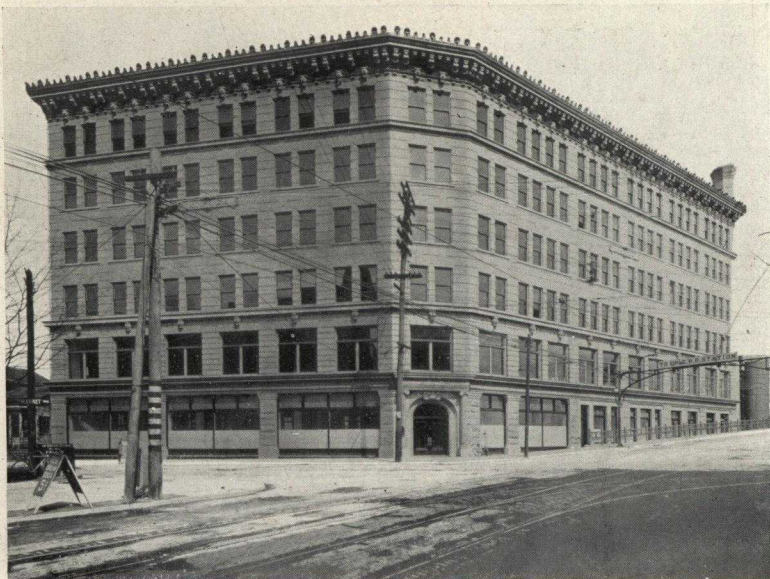
<http://web.nationalbuildingarts.org>

THE MULLINS SHEET METAL FIREPROOF WINDOWS

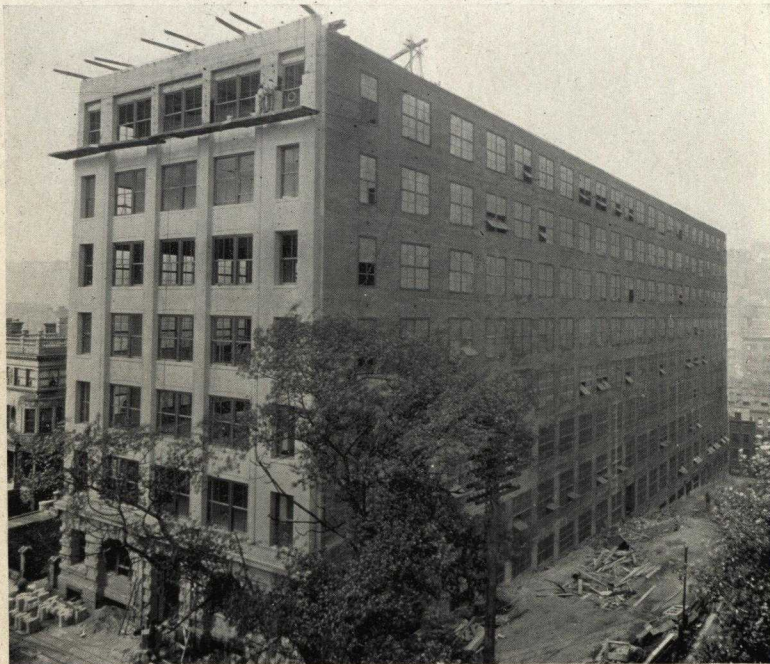
CATALOGUE NO. 1

THE W. H. MULLINS CO.
SALEM, OHIO
U. S. A.

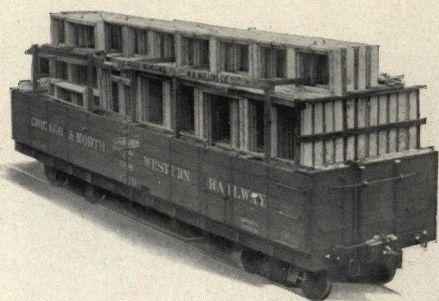
BUILDINGS THAT ARE PROTECTED BY THE MULLINS WINDOW



KILMER BUILDING, BINGHAMTON, N. Y.
T. I. Lacey & Son, Architects,
Binghamton, N. Y.



PUGH PRINTING CO. BUILDING, CINCINNATI, OHIO
Dittoe & Wisenall, Architects,
Cincinnati, Ohio



CARLOAD OF WINDOWS

FOREWORD

IN making our various products it has been our constant aim to offer nothing that will not stand the most rigid test and thorough investigation.

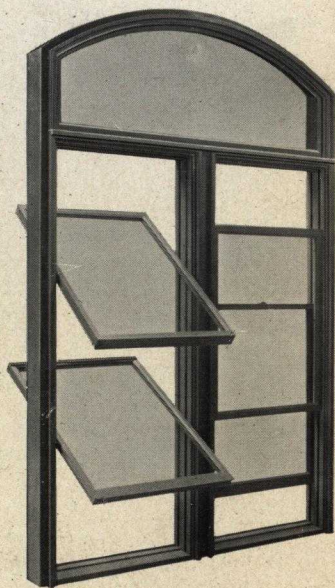
It is, therefore, with especial pride and satisfaction that we present, in this catalogue, the Mullins Fireproof Windows. Your earnest and careful consideration of the facts set forth in the following pages will convince you that these windows are exactly what we state they are — *fireproof* and *weather proof*.

Before an installation of fireproof windows is made there are several interested parties who desire to know wherein it is to their personal and individual advantage to have the Mullins Fireproof Windows used.

You will find the reasons given in this catalogue from the standpoint of the owner, tenant, architect, underwriter, and the builder, as well as that of the maker.

We are prepared to furnish estimates on the equipping of any building, regardless of size, with the Mullins Fireproof Windows, and sincerely trust we shall have the pleasure of hearing from you on this subject.

THE W. H. MULLINS CO.,
Salem, O., U. S. A.



DOUBLE-HUNG, MULLINS WINDOW, WITH TRANSOM



FOUR VIEWS OF DOUBLE-HUNG WINDOW

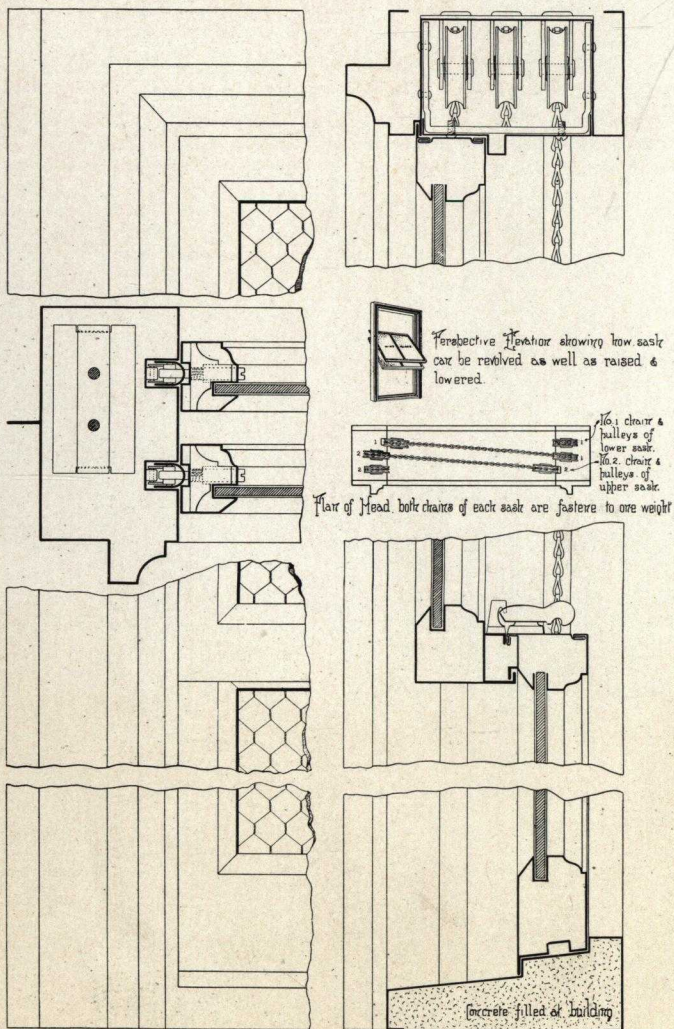
SPECIFICATIONS

OF THE MULLINS FRAME WITH SLIDING AND REVOLVING SASH

- HEAD** Is our patent hollow trussed construction with removable soffit, thereby giving easy access to the sash pulleys and chain and also affords a secure rest for our patent three pulley plates.
- JAMBS** Are our reinforced flush grooved jambs, which receive our *patent brass weather bars*, thus allowing sash to be revolved, raised, and lowered.
- SILL** Is of hollow construction to be filled with concrete at the building, through openings at back of side jambs.
- CONSTRUCTION** All parts are riveted, locked, and seamed, and in no case is solder used for holding parts together, but only as a finish at miters, etc.
- MATERIAL** All parts of frame are made of No. 22 gauge galvanized steel, especially prepared for our own use.
- SASH WEIGHTS** Are our sectional design, which are easily placed in stirrup through pocket in jamb.
- NAME PLATE** On each frame is fastened a Mullins name plate, which is a guarantee of first-class workmanship and protection in case of fire.
- NOTE** The windows can also be furnished at a reduced cost without the revolving feature.

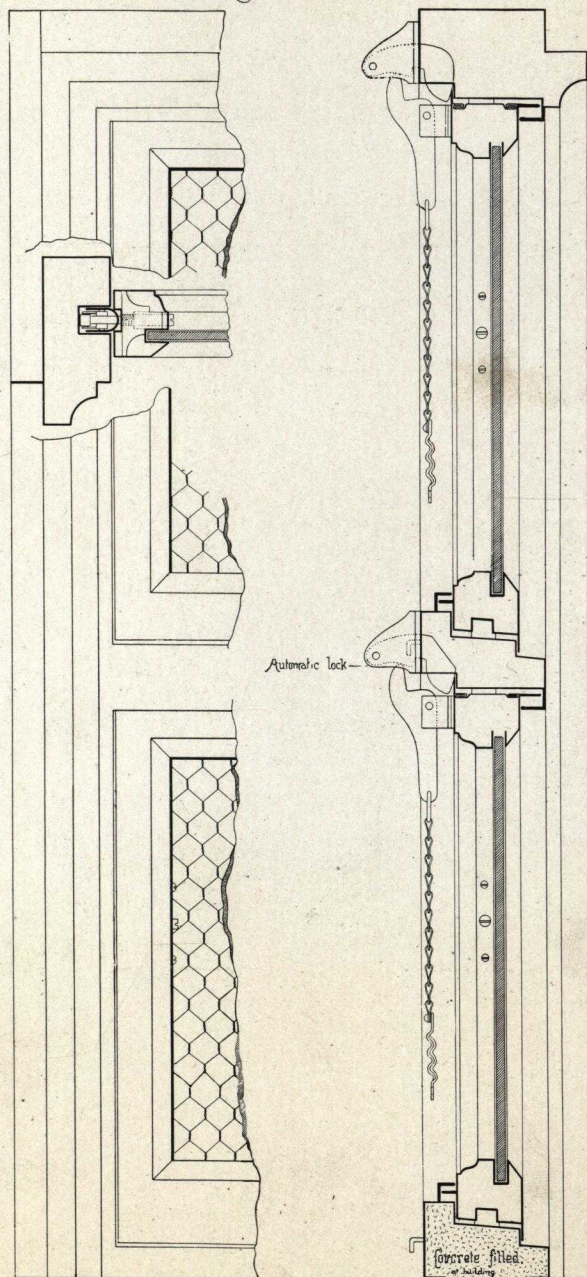
Detail of frame with sliding and revolving sash.

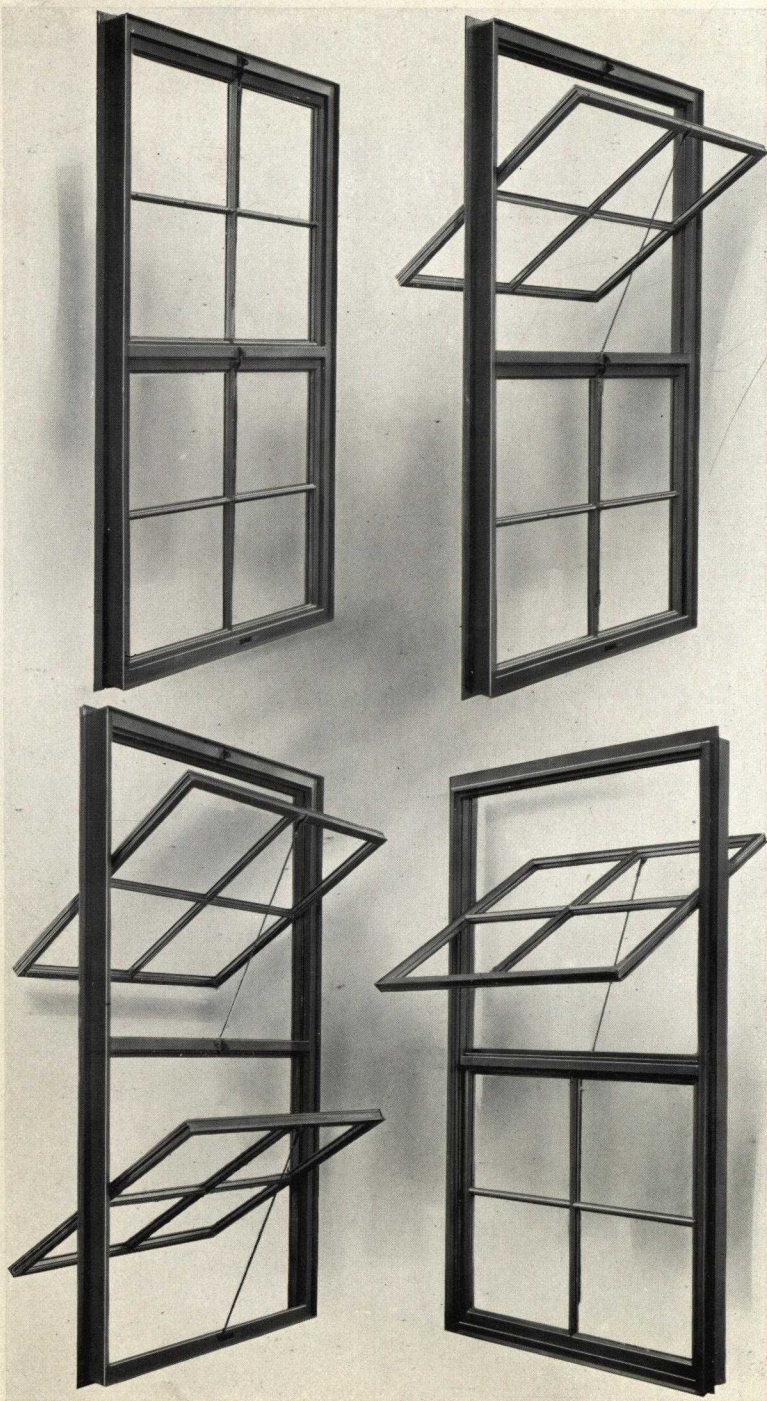
Scale, 2"=1'-0"



Window with two pivoted sash.

Scale 2"-1'-0"





FOUR VIEWS OF PIVOTED WINDOW

SPECIFICATIONS

OF THE MULLINS FRAME WITH PIVOTED AND AUTOMATIC CLOSING SASH

- HEAD** Hollow in section, lock seamed and riveted.
- JAMBS** Our lock seamed flush grooved jambs to receive our patent brass weather bars.
- SILL** Hollow in section to allow sill being filled with concrete at the building through openings at back of side jambs.
- TRANSOM BAR** Of strong construction, lugged and riveted to the jambs.
- AUTOMATIC
SASH LOCK** Our improved tumbler lever design, which is riveted to head and transom and to upper rail of sash. (See details and photographs.)
- SILL HOOKS** A sill hook is provided at sill and transom bar to fasten chain that holds the sash open. A fusible link is fastened to lower part of chain which, in case of fire, fuses and allows sash to close automatically.
- CONSTRUCTION** All parts of frame are riveted and lock seamed and in no case is solder used to hold parts together, but only as a finish at miters, etc.
- MATERIAL** All parts of frame are made of No. 22 gauge galvanized steel, especially prepared for our use.
- NAME PLATE** On each frame is fastened a Mullins name plate, which is a guarantee of first-class workmanship and protection in case of fire.

SPECIFICATIONS

OF SASH AS USED IN THE MULLINS FIREPROOF WINDOWS

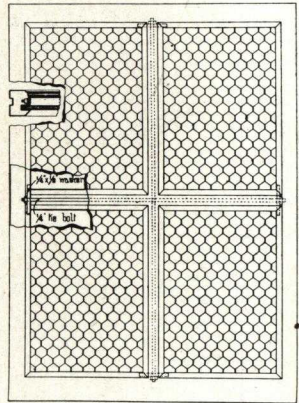
RAILS

Are $2\frac{1}{8}$ " thick, lock seamed and riveted, and in no case is solder used for holding parts together, but only as a finish of miters, etc.

Side rails are grooved to receive our patent brass covered weather bars. (See detail and description on pages 12, 13.)

MUNTINS

Are $1\frac{1}{8}$ " wide and $2\frac{1}{8}$ " deep, and are held together by $\frac{3}{16}$ " x $2\frac{3}{8}$ " iron bolts, outside half removable for glazing purposes, inside half being fastened to side, top, and lower rails by means of our patent system of $\frac{1}{4}$ " iron tie rods, which hold rails and muntins securely together under all conditions.



MATERIAL

All parts of sash are made of No. 24 galvanized steel, especially prepared for our own use.

HARDWARE

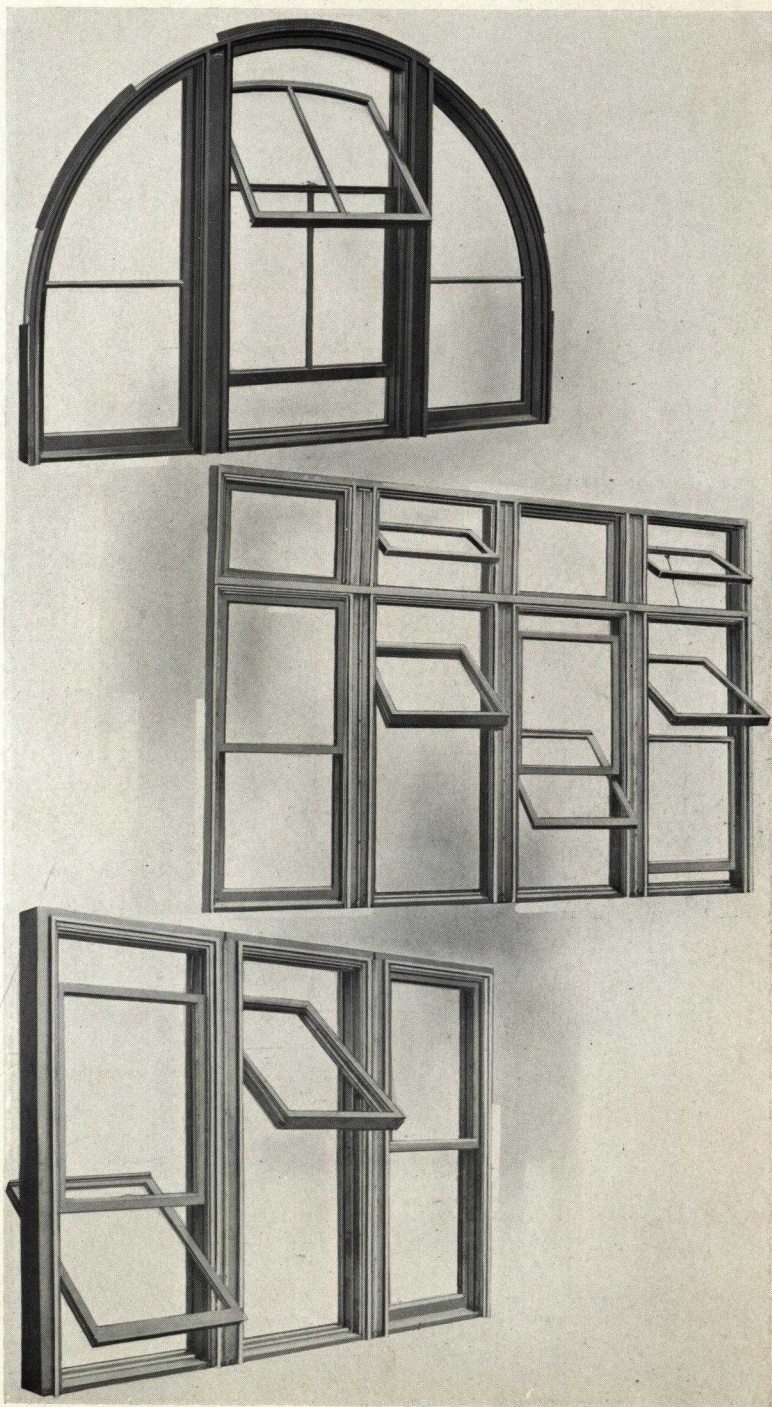
Unless otherwise specified, all pivots, sash locks for double-hung window, and lifts are of polished bronze. All other hardware and bracing are made of iron.

GLAZING

All one and two-light sash are glazed by removing slide at top of sash. Sash with four or more lights glaze from the face.

RABBITS

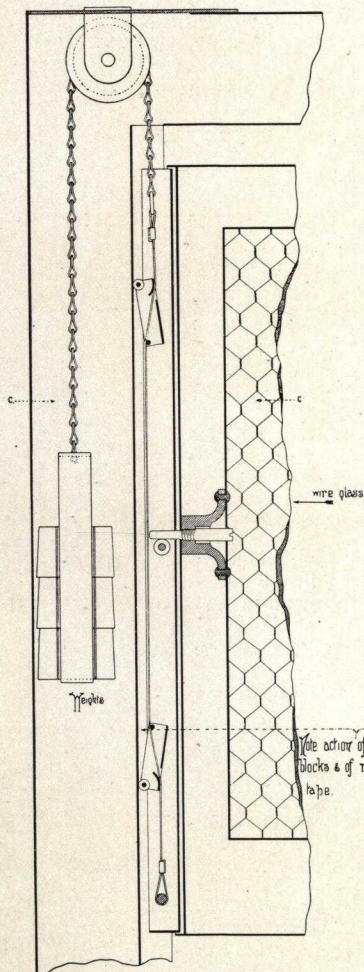
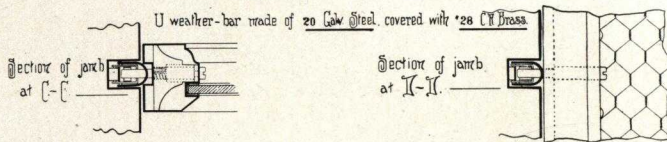
Are $\frac{3}{4}$ " deep, allowing $\frac{5}{8}$ " rest for glass, according to requirements of the National Board of Underwriters.



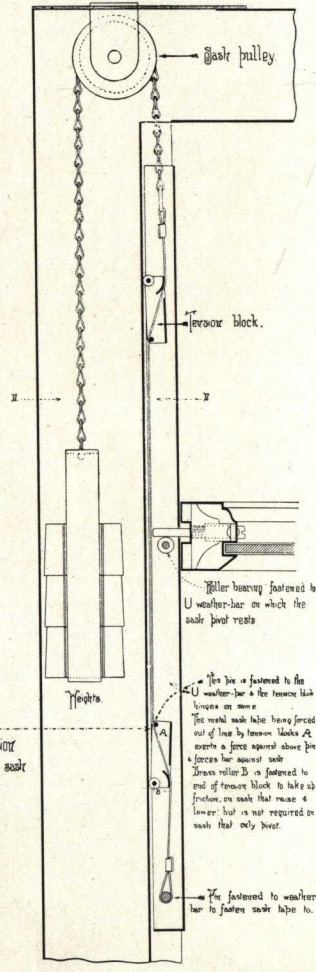
WINDOWS WE HAVE MADE

Weather Bar for Sash

Scale 2"-1'-0"



Sectional elevation & plan of joint, weather-bar & sash, showing weather-bar forced in groove of sash & sash in vertical position.



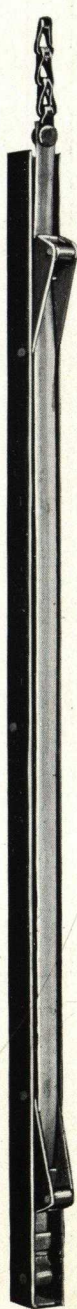
Sectional elevation & plan of joint, weather-bar & sash, showing weather-bar forced in joint by pivoting sash horizontally.

Detail of weather-bars used on H. H. Mullins' street metal fire-proof windows

Nelson's Patent, No. 751,747

THE MULLINS WEATHER BAR

NELSON'S PATENT, NO. 751,747



IS *simple and efficient* and is *perfectly weather proof*, and allows for any settling of building or variation in width from expansion or contraction, and prevents sash from rattling. It also makes away with all friction between sash and frame; therefore, it will outlast all other frames.

No springs are used to thrust it in groove of sash, for, as is well known, springs rust and lose their temper and become useless; therefore, springs cannot be depended on.

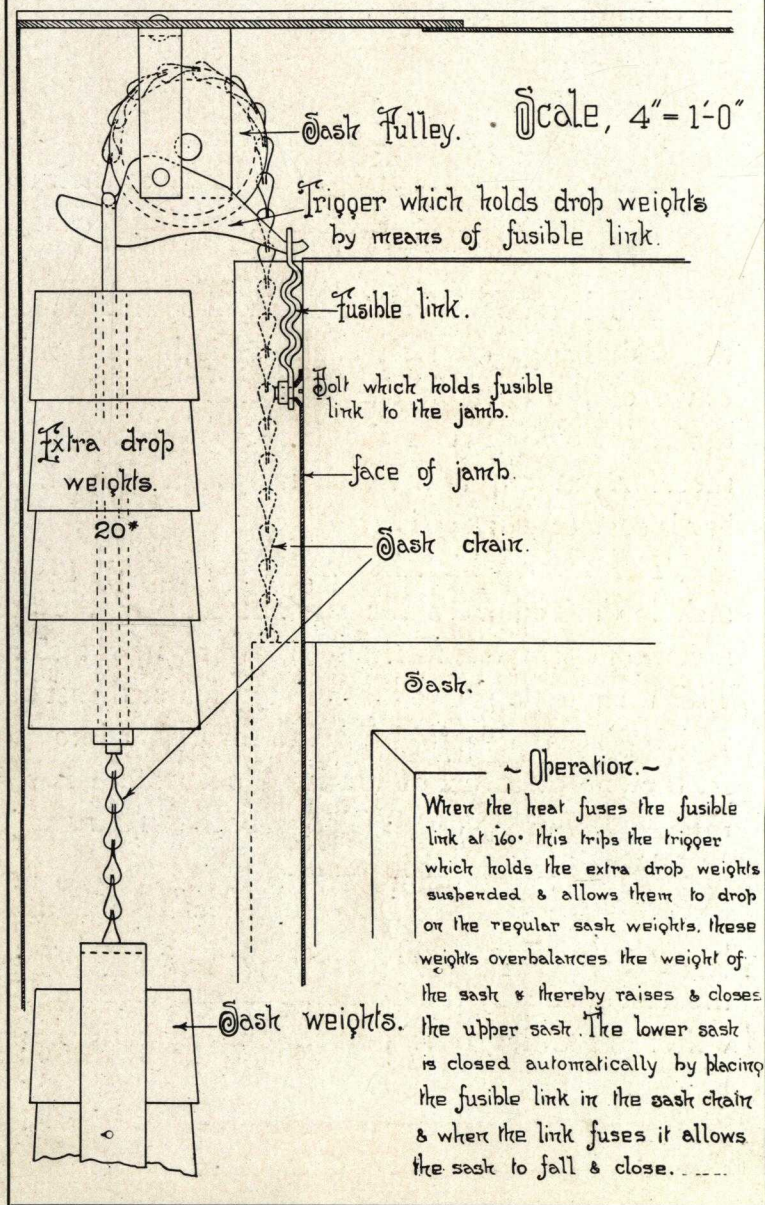
The Mullins Weather Bar will operate as long as the sash hangs on sash chain, as it is from this pull down of the sash on the sash chain that the force is derived which thrusts the bar into groove of sash; therefore, as long as the sash hangs on sash chain the bar is sure to work satisfactorily.

The force which holds the bar against groove in sash is derived from the straightening of the flexible metal tape which is fastened to lower end of sash chain. This metal tape passes through tension or thrust blocks, which gives the desired force to thrust bar into groove. At the end of thrust of tension blocks there is a brass roller which takes up all friction between bar and jambs when sash is raised or lowered.

Weather bars are U shape in section and made of heavy galvanized steel covered with sheet brass. At the test made by the National Board of Fire Underwriters at Chicago it proved entirely satisfactory, by keeping out all smoke, flame, and heat.

The accompanying cut and description will illustrate the bar, and the simplicity of its construction and operation will commend it to the most exacting.

Automatic closing device for window with revolving and sliding sash.



BUILDINGS THAT ARE PROTECTED
BY THE MULLINS WINDOW



BURNHAM HANNA, MUNGER CO., KANSAS CITY, MO.

HORACE LA PIERRE, ARCHITECT.
Successor to George Mathews, Kansas City, Mo.

WIRE GLASS AS USED IN OUR WINDOW

IS A safeguard to life and property in connection with building construction.

A thoroughly efficient fire stop for use in wall and partition openings, and, as such, permitting the diffusion of light at many points where solid masonry would otherwise be demanded.

A reinforced sheet glass which will maintain its integrity and unbroken surface even though cracked indefinitely, and, as such, eliminating the danger of falling glass, while the matter of repairs becomes one of convenience instead of necessity.

An article thoroughly original in conception, and, through a long period of experimentation and practical experience, brought to a high degree of perfection in material and method of manufacture, as well as utility and finish of product.

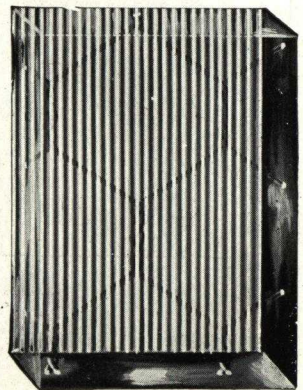
(1) Influence in diminishing and largely preventing loss of property from contributed fires due to exposure hazard, the losses from external exposure alone amounting to one-third of total loss, or, say, \$60,000,000 per year in the United States alone.

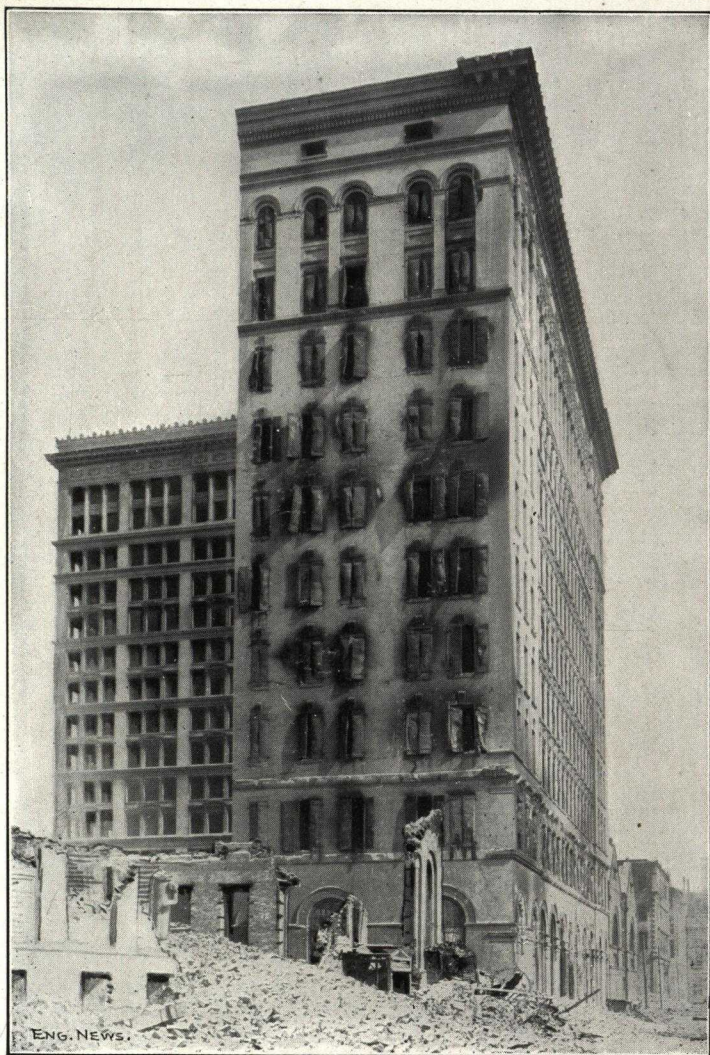
(2) Similarly saving hazard to life in like condition.

(3) Allowing such security with free admission of sunlight in all conditions, in many of which this would be impossible without wire glass.

(4) Providing security against fire by a light-admitting, fire-excluding device, which is an integral part of the building, and practically self-operative in emergency, and not subject to deterioration.

(5) Providing aid to firemen in discovering location of fire, securing access to fire without hazard from falling shutters of glass.



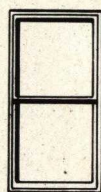


SHUTTERS THAT DID NOT PROTECT—MARYLAND TRUST BUILDING

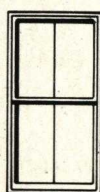
“In this case only were the windows protected by ‘fire-proof’ shutters. The rear wall of the Maryland Trust Company’s building had underwriters’ shutters of wood covered with steel plate at every window. * * * These had been closed before the building took fire. * * * They were subjected to fire on both sides and had burst open. All were badly warped and twisted.”

Insurance Engineering, New York.

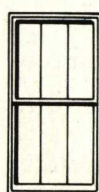
Elevation of Frames with Sliding and Revolving Sash.



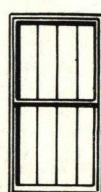
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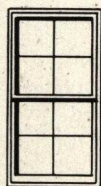
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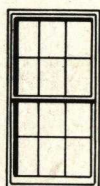
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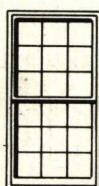
A.4.v.



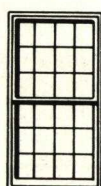
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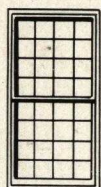
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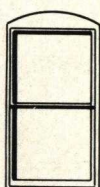
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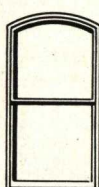
A.12.



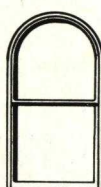
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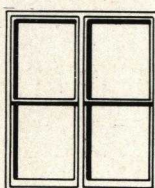
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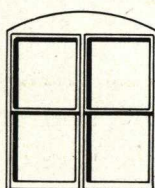
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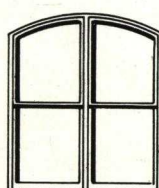
D.1.



E.1.

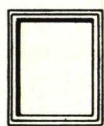


F.1.

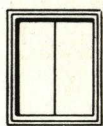


G.1.

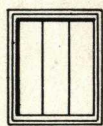
Elevation of Frames with Pivoted and Stationary Sash.



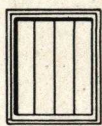
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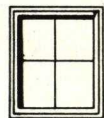
O.2.



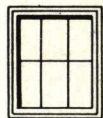
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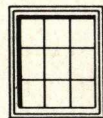
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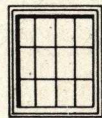
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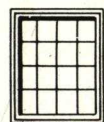
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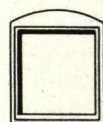
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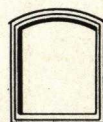
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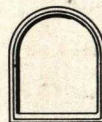
O.16.



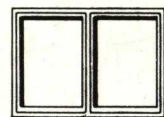
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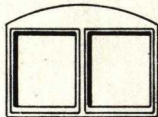
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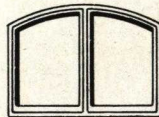
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T.1.

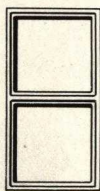


U.1.

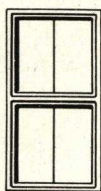


V.1.

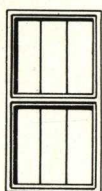
Elevation of Frames with Pivoted and Stationary Sash.



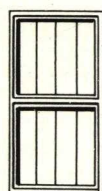
H.1.



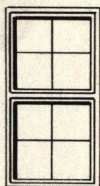
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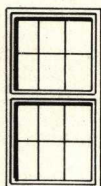
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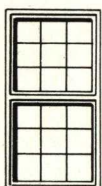
H.4.v.



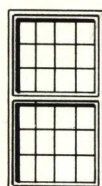
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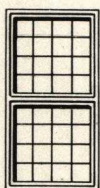
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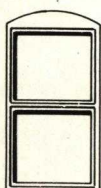
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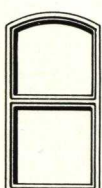
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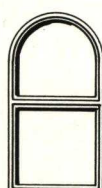
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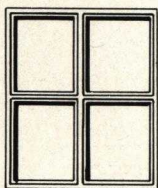
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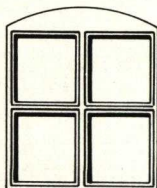
J.1.



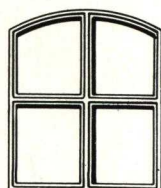
K.1.



L.1.



M.1.



N.1.

DIRECTIONS

IN ORDERING OR WRITING FOR QUOTATIONS

ALWAYS give measurement of opening between brick jambs and from sill to lintel, specifying width first and height last.

When not convenient to send plans to us for estimates, we have, on pages 18, 19, and 20, shown elevations of windows, so that by specifying these windows as designated we can figure same intelligently.

The letter designates the style of window, the numeral following same gives the quantity of lights in each sash.

For example: A square head, single window which the sash raises and lowers, and also pivots having four lights in each sash, would be specified one window, A 4, size 4' 0" x 8' 0"; if window had a segment head and sash the style would be C; if each sash had two lights it would be C 2.

We do not furnish our automatic closing device, as shown on page 14, with our sliding and revolving windows unless so specified.



POGUE BUILDING, CINCINNATI, OHIO
James McLaughlin, Architect,
Cincinnati, Ohio

THE OWNER'S TEST

NO owner of a building wants to be liable for the needless loss of human life. The old-time metal fire shutters prevented the discovery of fires and helped to start many of them, as demonstrated in the Baltimore and other conflagrations.

The marked advantages of the Mullins Fireproof Windows from the owner's standpoint may be briefly summarized :

They cost no more than old-fashioned methods of construction, i. e., combined wood frames and metal shutters.

They reduce materially the cost of insurance on both buildings and contents.

They are far more durable and cost less for repairs.

They are glazed with wire glass and fitted with our patent combination sliding and revolving weather bar, which allows for any settling or expansion and contraction and is perfectly weather proof and fireproof.

They will do everything that any metal frame fireproof window can do, and several things that other fireproof windows cannot do.

They will actually pay for their cost *ten times over in the saving they effect*, in reduction of insurance, and by the *increased rental* a building fitted with them will bring on account of the protection from fire which they afford to the occupant.

THE TENANT'S TEST

COMFORT, convenience, economy, and safety are what appeal most to the tenant of a building, and The Mullins Fireproof Window meets these requirements as no other window does.

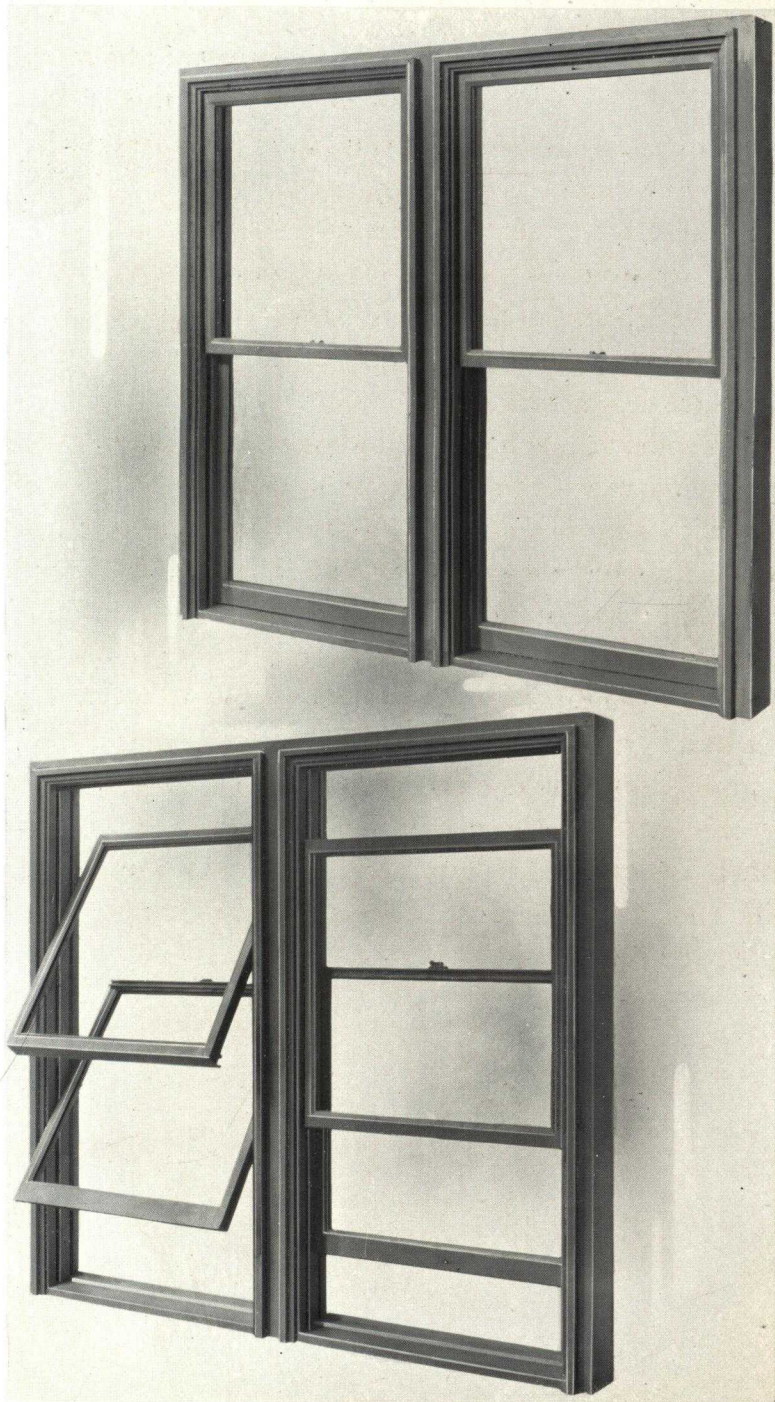
By the use of our patent weather bar the entire window space can be used for ventilation, by swinging out both sashes and raising them to the top of the window, or by simply swinging them into a horizontal position by a push of the hand on the lower rail of sash.

Both sides of each pane of glass can be washed *from the interior of the room* by simply revolving the sash.

The cost of insurance on stock is materially reduced, and the possibility of damage by fire is reduced to the minimum.

To safeguard the tenant's property when he is not there to watch it, and absolutely prevent the communication of fire from other buildings, and the hollow-metal construction is practically burglar proof as well.

The double-chain overhead weight device absolutely prevents The Mullins Fireproof Sash from sticking or binding, whether it is to be raised from either side or from the center, as the chains of one sash are fastened to one weight, thus keeping the sash plumb and true.



WINDOWS WE HAVE MADE

THE ARCHITECT'S TEST

THE value of metal fireproof windows is indisputable.

To win the unqualified approval of the architect, a fireproof window must possess the following characteristics:

It must be first class in workmanship.

It must be pleasing to the eye.

It must be perfect in every detail and construction.

It must admit the light at all times.

It must provide for perfect ventilation and at the same time be air and dust proof.

It must have a sash that does not rattle, that can be easily raised or lowered—one that *revolves completely* and that can be raised or lowered *when swung open*. This is accomplished by the use of our patent weather bar, which is simplicity itself, and therefore cannot get out of order.

It must be capable of being closed and locked automatically in case of fire.

It must be so made that it will stand the fiercest of fires. This was successfully demonstrated by the manner it stood the severe test at Laboratory of the National Board of Underwriters at Chicago, as shown by photograph on page 28.

The Mullins Fireproof Window complies with every one of the above requirements.

THE BUILDER'S TEST

METAL fireproof windows are steadily growing in favor.

From the standpoint of the contractor and builder the window should comply with the following specifications :

It must be easy to handle.

It must be mechanically perfect in its construction.

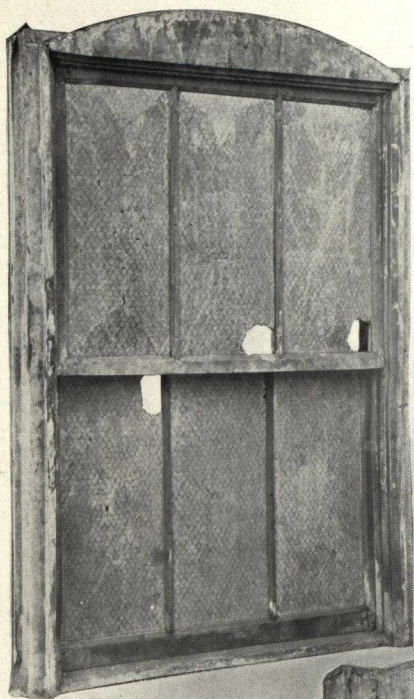
It must be so simply made that the ordinary workman can adjust it quickly and easily.

It must have a sash that is rigid and easily glazed.

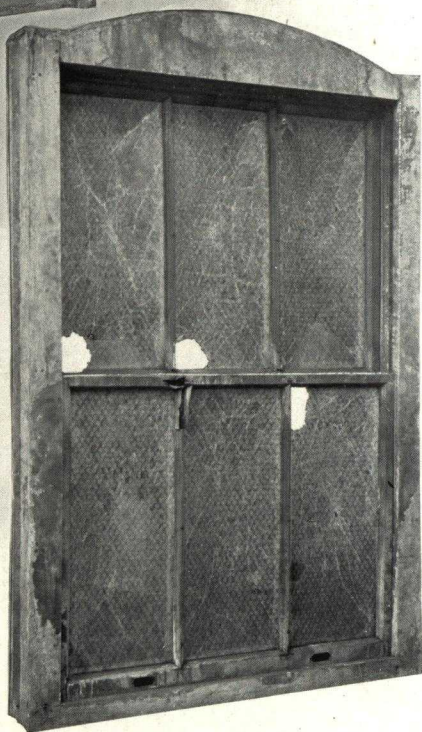
It must be built in a factory equipped with special machinery and with a sufficient capacity for executing every order—no matter what the size—with promptness and dispatch.

It must be built by a manufacturer who has a reputation for living up to his contracts, and for *delivering the goods on time*.

The Mullins Fireproof Window complies absolutely with these requirements—and *it is the only fireproof window manufactured that does so*.



EXTERIOR AND INTERIOR
PHOTOGRAPHS OF THE MUL-
LINS FIREPROOF WINDOW
WHICH STOOD THE FIRE AND
WATER TESTS AT THE NA-
TIONAL BOARD OF FIRE UN-
DERWRITERS' LABORATORY
AT CHICAGO, ILL.



THE FRACTURES IN
GLASS WERE MADE BY
THE INSPECTORS AFTER
THE FIRE AND WATER
TESTS FOR THE PURPOSE
OF EXAMINING THE CON-
STRUCTION OF THE SASH,
ETC.

THE UNDERWRITERS' TEST

THERE is absolutely no question as to the comparative value of our metal fireproof windows over the old-fashioned metal or metal-covered wood shutters. Repeated tests have proved conclusively the superiority of metal fireproof windows.

The ideal fireproof window should be constructed to meet the following requirements:

It must be absolutely fireproof.

It must have hollow sheet metal frames and sash, fitted with wire glass.

It must be riveted and locked together so that it will not fall apart when exposed to intense heat, solder only being used to finish the seams and miters.

The Mullins Window has stood the National Board of Fire Underwriters' test to which it has been subjected at their Laboratory at Chicago, *and is endorsed* by them.



FAULTLESS STARCH CO., KANSAS CITY, MO.
Shepard & Farrar, Architects,
Kansas City, Mo.

THE MAKER'S TEST

THE method of manufacture has much to do with the intrinsic value of any article.

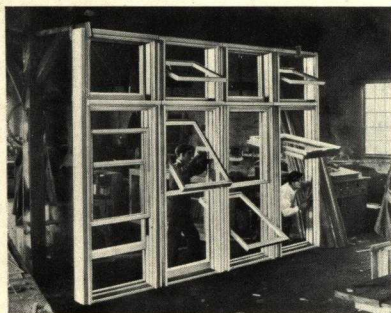
The machines and tools used in the making of The Mullins Fireproof Windows in our factory at Salem, Ohio, are the latest and most improved type, designed and built expressly by us to produce these windows.

Every part used in the building of The Mullins Window is mechanically perfect—every joint is double riveted or fastened with interlocking edges, which can never pull apart, as proven in the underwriters' tests.

Every frame and every sash is made with mathematical exactness—with a nicety and a precision that insures faultless operation.

The splendid equipment of The Mullins factory, the well-known skill of The Mullins workmen, are in themselves a guarantee of the sterling merit of every window that leaves the establishment.

When you add to this the fact that every window shipped from Salem is backed by The W. H. Mullins Company's reputation—a reputation won and rigidly maintained for over a quarter of a century—you may rely absolutely upon receiving the highest intrinsic value at the lowest possible cost *compatible with sterling merit.*



WE realize that in order to manufacture metal windows that are weatherproof and fireproof it is necessary to have the most complete and modern machinery and workmen of the highest skill. We have spared no expense in thus equipping our factory, and referring to the many buildings which are fitted with Mullins Fireproof Windows you will find they are giving complete satisfaction in every way.

We are constantly on the lookout for any improvements to our equipment which will in any way raise the standard of our work or reduce the cost of same to our customers.

We can execute orders without delay, as we carry in stock all of the materials and fittings for these windows, making them up to the sizes given on receipt of order.

We hope that if you are interested in fire protection you will correspond with us. We will be glad to write you fully and quote you prices.

THE W. H. MULLINS CO.,

Salem, Ohio, U. S. A.

